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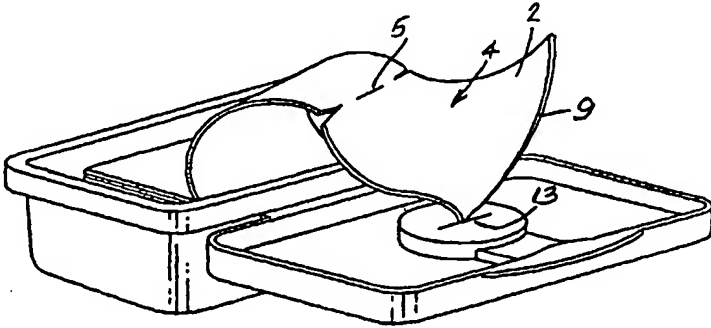
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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

|   |           |   |
|---|-----------|---|
| <b>(51) International Patent Classification <sup>7</sup> :</b><br><b>A47K 10/24</b>   | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 00/65972</b><br><b>(43) International Publication Date:</b> 9 November 2000 (09.11.00)  |
| <b>(21) International Application Number:</b> PCT/US00/11132<br><b>(22) International Filing Date:</b> 26 April 2000 (26.04.00)<br><br><b>(30) Priority Data:</b><br>09/301,725 29 April 1999 (29.04.99) US<br><br><b>(71)(72) Applicant and Inventor:</b> KLEIN, Kenneth, S. [US/US];<br>14361 Iyopawa Island, Coldwater, MI 49036 (US).<br><br><b>(74) Agents:</b> WEINER, Irving, M. et al.; Weiner & Burt, P.C., 116<br>First Street, P.O. Box 186, Harrisville, MI 48740 (US). |           | <b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).<br><br><b>Published</b><br><i>With international search report.</i> |
| <b>(54) Title:</b> GENITALIA TOWELETTE AND DISPENSER<br><br><b>(57) Abstract</b><br><p>A moist genitalia towelette (4), and dispenser (1) for use in connection with sexual intercourse. The towelette contains a cleansing solution to help prevent infections. Optionally, the towelette may also contain a lubricant and/or a flavoring agent.</p>   |           |   |

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## **GENITALIA TOWELETTE AND DISPENSER**

The present application claims priority from United States Patent Application Serial Number 09/301,725 filed April 29, 1999.

5           The present invention relates generally to a genitalia towelette. In particular, the invention relates to a moist antiseptic genitalia towelette and an associated dispenser therefor.

### **Background of the Invention**

10           There is a major need to prevent the spread of common infections, such as yeast infections and bladder infections, and viruses which are transmitted through sexual contact, including genital herpes viruses (herpes simplex virus type 2, HSV-2), the human immunodeficiency virus (HIV, the causative agent of AIDS), hepatitis viruses, and papilloma viruses. The purpose of the present invention is to fulfill this need to a great extent.

### **Summary of the Invention**

15           The present invention provides a moist genitalia towelette for use in cleaning genitalia prior to and during sexual intercourse, comprising a substrate and a cleansing solution for pre-moistening the substrate to help prevent infections.

20           The invention also provides, in combination, moist towelettes and an associated dispenser therefor, including moist genitalia towelettes for use in cleaning genitalia prior to and during sexual intercourse. The towelettes are pre-moistened with a cleansing solution to help prevent infections. The associated dispenser is dimensioned and shaped

to hold the moist genitalia towelettes therewithin. The dispenser is sufficiently sealed to prevent substantially the escape of moisture therefrom. The dispenser is preferably, but not necessarily, provided with a slit having slit surfaces or sides spaced apart a distance greater than the thickness of one of the towelettes to permit a towelette in the  
5 dispenser extending through the slit to be pulled through the slit.

It is an object of the invention to provide a moist towelette for use strictly for the genitalia.

Another object of the invention is to provide such a towelette for use prior to and/or during sexual intercourse.

10 A further object is to provide such a towelette which can also be used internally.

Another object is provide such towelettes in a container or dispenser suitable for the public and households.

A further object is to provide such a towelette which contains a cleansing solution to help prevent common infections, such as yeast infections and/or bladder  
15 infections.

An optional object is to provide such a towelette which also contains a lubricant and/or a flavoring agent.

Another object is to provide such a towelette, tissue and/or cleaning pad which is antiseptic.

20 These and other objects, advantages and features of the invention will become apparent to those persons skilled in the art when reading the following detailed description in conjunction with the accompanying drawings.

**Brief Description of the Drawings**

FIG. 1 is an isometric view of a preferred embodiment of the invention.

FIG. 2 is an isometric view of the FIG. 1 embodiment wherein the free end of inventive moist towelette has been pulled through a slit in the lid of the dispenser.

5           FIG. 3 is an enlarged isometric view of the slit construction depicted in FIG. 2.

FIG. 4 is an isometric view of the FIG. 1 embodiment with the dispenser lid opened.

FIG. 5 is a sectional view of the embodiment of FIG. 1 taken along the line 5-5 in FIG. 1.

10           **Description of Some Preferred Embodiments**

The present invention provides a novel moist genitalia towelette 1 for use in cleaning genitalia prior to and during sexual intercourse. The towelette 1 is pre-moistened with a cleansing solution to prevent infections.

15           Optionally, the towelette 1 may also contain a lubricant and/or a flavoring substance.

The cleansing solution preferably, but not necessarily, may include a zinc salt. Preferably, but not necessarily, the zinc salt should ionically dissociate at a rate sufficient to release divalent zinc ions at a concentration which significantly inhibits genital herpes viruses.

20           The cleansing solution should preferably, but not necessarily, include a zinc salt selected from the group consisting of zinc acetate, zinc propionate, zinc butyrate, zinc formate, zinc gluconate, zinc glycerate, and zinc lactate.

With reference to FIGS. 1 through 5, an associated dispenser 1 is dimensioned and shaped to hold the moist genitalia towelettes 2 therewithin. The towelettes may optionally comprise a folded stack 3 of connected towelette sections 2. In such an arrangement, a moist towelette sheet 4 is defined as a continuous, elongated sheet 4.

5 The sheet 4 is folded into separate connected towelette sections 2 which are separated one from another by a line of perforations 5 through the sheet 4 in a line extending from one side to the other of sheet 4. The sheet 4 may be folded in a zig zag, overlay pattern which defines a single uniform generally rectangular shaped packet or stack 3 of towelette sections 2 with each section 2 being separated one from another by spaced tear  
10 perforations 5.

The dispenser 1 includes a lower or towelette containing box 6 and a cooperating top or lid 7. The box 6 and lid 7 may preferably, but not necessarily, be made from moisture-resistant plastic or cardboard. The box 6 is generally a rectangular parallelepiped, and has a circumferential top rim 8 which defines an opening for receipt  
15 of a stack 3 of folded moist towelette sections 2. The box 6 is dimensioned to fully receive the rectangular parallelepiped stack 3 with a free end 9 of a towelette section 2 extending toward the lid 7.

The lid or top 7 is generally congruent with and overlies the rim 8. In the preferred embodiment shown in the drawings, a living hinge 10, along one side of the rim 8 and one side of the lid 7, connects the lid 7 with the box 6. This enables the lid 7  
20 to be pivoted out of engagement with the rim 8 to permit refilling the box 6 with a new stack 3 when desired. The rim 8 and the lid 7 are constructed so that when they overlie

one another, they effect a seal sufficient to prevent the escape of moisture from the moistened stack 3.

The lid 7 includes a central counterbore 11 which is positioned centrally in the lid 7. Counterbore 11 could be cylindrical in shape with a matching lower counterbore surface 12. Those skilled in the art will recognize alternative shapes for counterbore 11. Importantly, the counterbore 11 covers a slit 13. In the center of the surface 12 is the slit 13 defined by slit sides 14 and 15.

The spacing of the sides 14 and 15 is an important feature inasmuch as the slit 13 is designed to frictionally restrict movement of the towelettes 2, in particular, the free end 9 thereof. The slit 13 comprises a construction to frictionally engage the elongated sheet 4 with the force required to separate towelette sections 2 and tear adjacent perforations 5 which is about the same or slightly more than the force to move the sheet 4 through the slit 13 manually. In this manner, the sheet 4 may be moved through the slit 13, following tearing adjacent the perforations 5 while the sheet 4 remains with the free end 9 in the slit 13 for further gripping.

The lid 7 also includes a cap 16 cooperative therewith. The cap 16 includes a body section 17 which generally congruent with the counterbore 11. The body section 17 may include a circumferential rib 18 which coacts with the inside surface 19 of the counterbore 11 to provide substantially moisture proof sealing of the cap 16. This precludes the escape of moisture from the slit 13 and maintains the contents of dispenser 1 and any protruding free end 9 of the sheet 4 in a moistened condition when the cap 16 is seated in the counterbore 11. The cap 16 also includes an extension or hinge member



20 which is pivotally connected in a recess 21 for pivoting about an axis 22. The cap 16 may be moved from closed position (shown in FIGS. 1 and 5) to a closed position (shown in FIGS. 2 and 3), and vice versa. The cap 16 further includes a projecting tab 23 which be manually engaged to move the cap 16 about its pivot axis 22.

5           The slit 13 may be augmented by having upward tabs or projections 24 on one or both sides of the slit 13. In the embodiment depicted, the slit 13 is a straight slit with the upward projections 24 positioned on opposed or opposite sides thereof. The upward projections 24 each include a center detent 25 which facilitates gripping of the free end 9 of the towelette sheet 4. The upward projections 24 are sized to extend upwardly  
10           within the counterbore 11 so that the cap 16 may fit over the projections 24 as shown in FIG. 5. The projections 24 preferably, but not necessarily, extend outwardly from surface 12 to facilitate feeding the free end 9 through the slit 13. The projections 24 may fit over the slit 13 in part.

          The dispenser 1 permits easy grasping of the free edge 9 of the top towelette 2,  
15           and provides for the ability to withdraw said towelette 2 and separate it from the next towelette 2 while leaving a small portion of the next towelette 2 exposed. This is accomplished by achieving a balance between the strength of the moist towelette sheet 4 with its perforation pattern and the friction derived from the shape, size and construction of the slit 13 and its adjacent components.

20           The preferred embodiments of the invention as exemplified hereinabove and/or in the accompanying drawings are only to be limited by the scope of the following claims and their equivalents primarily because the present invention embraces variations which

will occur to those persons skilled in technology.

CLAIMS

1       1.    In combination, moist genitalia towelettes and an associated dispenser therefor  
2       comprising:

3               moist genitalia towelettes for use in cleaning genitalia prior to and during sexual  
4       intercourse;

5               said towelettes being pre-moistened with a cleansing solution to help prevent  
6       infections;

7               an associated dispenser being dimensioned and shaped to hold said moist  
8       genitalia towelettes therewithin;

9               said associated dispenser being sufficiently sealed to prevent the escape of  
10      moisture therefrom;

11      and

12              said associated dispenser being provided with a slit having slit sides spaced apart  
13      a distance greater than the thickness of one of said moist genitalia towelettes to permit  
14      a moist genitalia towelette in said dispenser extending through said slit to be pulled  
15      through said slit.

1       2.    The combination of claim 1, wherein:

2              said moist genitalia towelettes also contain a lubricant.

1           3.   The combination of claim 1, wherein:  
2               said moist genitalia towelettes also contain a flavoring substance.

1           4.   The combination of claim 2, wherein:  
2               said moist genitalia towelettes also contain a flavoring substance.

1           5.   The combination of claim 1, wherein:  
2               said cleansing solution includes a zinc salt.

1           6.   The combination of claim 1, wherein:  
2               said cleansing solution includes a zinc salt which ionically dissociates at a rate  
3               sufficient to release divalent zinc ions at a concentration which significantly inhibits  
4               genital herpes viruses.

1           7.   The combination of claim 1, wherein:  
2               said cleansing solution includes a zinc salt selected from the group consisting of  
3               zinc acetate, zinc propionate, zinc butyrate, zinc formate, zinc gluconate, zinc glycerate,  
4               zinc glycolate, and zinc lactate.

1           8. The combination of claim 1, wherein:

2                   said associated dispenser has a cap pivotally connected thereto; and

3                   said pivotal cap is dimensioned and shaped to sealingly cover said slit and a  
4                   portion of said moistened genitalia towelette extending therethrough.

1           9. In combination, moist genitalia towelettes and an associated dispenser therefor  
2                   comprising:

3                   moist genitalia towelettes for use in cleaning genitalia prior to and during sexual  
4                   intercourse;

5                   said genitalia towelettes being pre-moistened with a cleansing solution to help  
6                   prevent infections;

7                   an associated dispenser being dimensioned and shaped to hold a sheet of said  
8                   moist genitalia towelettes therewithin;

9                   said associated dispenser being sufficiently sealed to prevent the escape of  
10                  moisture therefrom;

11                  and

12                  said associated dispenser being provided with a slit having slit sides spaced apart  
13                  a distance greater than the thickness of one of said moist genitalia towelettes to permit  
14                  a moist genitalia towelette in said dispenser extending through said slit to be pulled  
15                  through said slit while being frictionally restrained by said slit sufficiently to permit  
16                  tearing of said sheet along a line of spaced perforations in said sheet.

1           10.   The combination of claim 9, wherein:  
2                   said associated dispenser having a cap pivotally connected thereto; and  
3                   said pivotal cap being dimensioned and shaped to sealingly cover said slit and a  
4           portion of said moistened genitalia towelette extending therethrough.

1           11.   The combination of claim 9, wherein:  
2                   said cleansing solution includes a zinc salt which ionically dissociates at a rate  
3           sufficient to release divalent zinc ions at a concentration which significantly inhibits  
4           genital herpes viruses.

1           12.   The combination of claim 9, wherein:  
2                   said cleansing solution includes a water-soluble organic zinc salt at a  
3           concentration of about 0.5% to about 30% measured as weight per volume.

1           13.   The combination of claim 9, wherein:  
2                   said moist genitalia towelettes also contain a lubricant.

1           14.   The combination of claim 9, wherein:  
2                   said moist genitalia towelettes also contain a flavoring substance.

1           15.   The combination of claim 9, wherein:  
2                   said cleansing solution includes a zinc salt selected from the group consisting of  
3           zinc acetate, zinc propionate, zinc butyrate, zinc formate, zinc gluconate, zinc glycerate,  
4           zinc glycolate, and zinc lactate.

1           16.   A moist genitalia towelette for use in cleaning genitalia prior to and during sexual  
2           intercourse, comprising:  
3                   a substrate;  
4                   a cleansing solution for pre-moistening said substrate to help prevent infections;  
5           and  
6                   a zinc salt in said cleansing solution.

1           17.   A moist genitalia towelette according to claim 16, wherein:  
2                   said towelette also includes a lubricant.

1           18.   A moist genitalia towelette according to claim 16, wherein:  
2                   said towelette also includes a flavoring substance.

1       19.   A moist genitalia towelette according to claim 16, wherein:  
2               said cleansing solution includes a zinc salt selected from the group consisting of  
3       zinc acetate, zinc propionate, zinc butyrate, zinc formate, zinc gluconate, zinc glycerate,  
4       zinc glycolate, and zinc lactate.

1       20.   A moist genitalia towelette according to claim 16, wherein:  
2               said cleansing solution includes a zinc salt which ionically dissociates at a rate  
3       sufficient to release divalent zinc ions at a concentration which significantly inhibits  
4       genital herpes viruses.



FIG 1

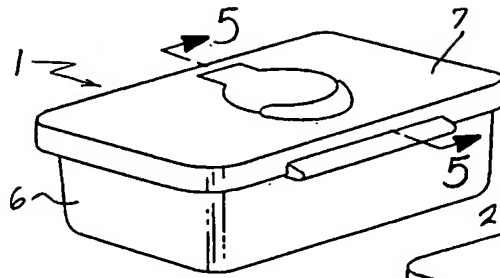


FIG 2

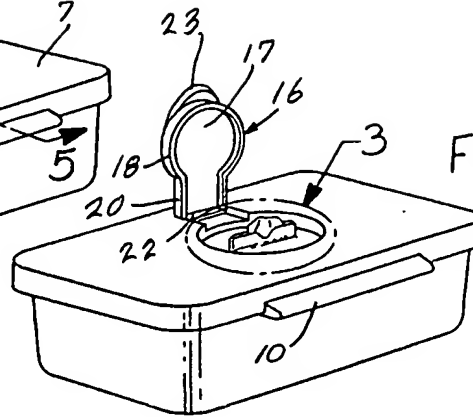


FIG 3

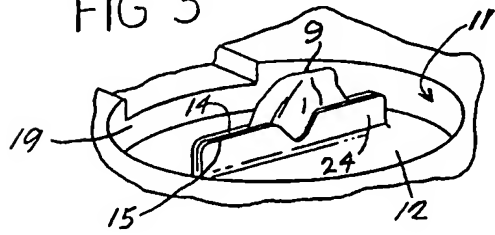


FIG 4

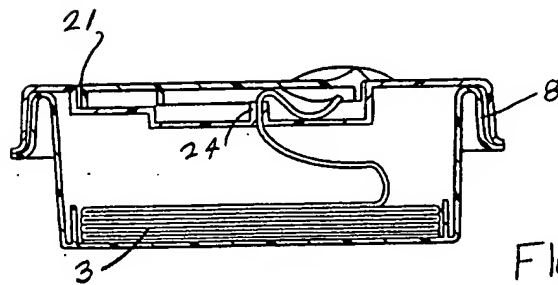
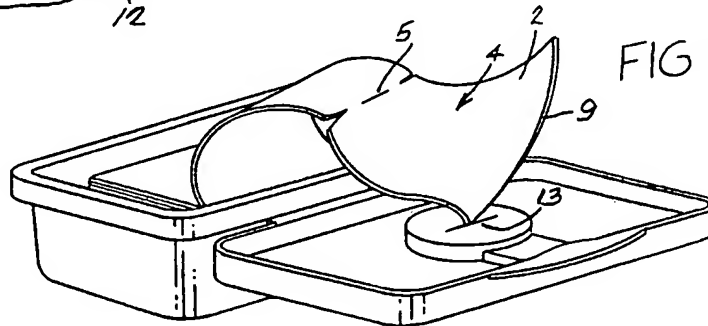


FIG 5

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/11132

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A47K 10/24

US CL : 206/494; 221/48, 63

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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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| X<br>---  | US 5,647,506 A (JULIUS) 15 July 1997, entire document.                             | 1, 2, 9, 10, 13       |
| Y         |  | 3-8, 11, 12, 14-20    |
| Y         | US 5,531,325 A (DEFLANDER et al.) 02 July 1996, entire document.                   | 1-20                  |
| X<br>---  | US 5,467,893 A (LANDIS, II et al.) 21 November 1995, entire document.              | 1, 2, 9, 10, 13       |
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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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| Y         | US 5,368,188 A ((TWARDOWSKI) 29 November 1994, entire document.                    | 1-20                 |